From:

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Date:

5/13/98 10:05am

Subject:

CASTEX SYSTEMS REMOVAL POLREP No. 10

Date:

05/13/98

Subject:

CASTEX SYSTEMS REMOVAL,

Jennings, Jefferson Davis Parish, LA

From:

Mike Ryan, OSC, U.S. EPA, Region 6 (214-665-2273)

To:

Director, OERR

Charles A. Gazda, RPB, EPA Region 6

Secretary, Louisiana Department of Environmental Quality

Commanding Officer, USCG-D8(m)

Commanding Officer, USCG Gulf Strike Team

POLREP No.: 10

**Event: Removal Action** 

Site ID Nos.: Z663 (FPN 08-6-144)

Start Date: 08/19/96 Demobilization Date: N/A

Site Type: Inactive NOW facility

Site Latitude/Longitude: 30o 11' 20" N, 92o 36' 55" W

#### I SITUATION

### A. Site Description

The Castex System Site is a nonhazardous oil-field waste (NOW) disposal facility that was abandoned in 1989 shortly after a fire and catastrophic failure of the produced water storage tank battery. The site is located approximately three miles southeast of Jennings, Jefferson Davis Parish, Louisiana. The facility is in a rural area and is situated adjacent to a marsh and one mile west of the Mermentau River.

# B. Description of threat

Approximately 9700 barrels (bbls) of NOW fluids are contained in 19 above ground storage tanks (ASTs), varying in condition from fair to poor. The failed storage tanks contained naturally occurring radioactive material (NORM) sediments that were spilled into the containment basin and mixed with oily sludge. The containment basin has been breached on the south side and is releasing oil water and NORM sediments into the marsh. The marsh flows into the Mermentau River, which flows through Grand Lake to the Gulf of Mexico. The facility also has eleven waste management units (WMUs) that contain approximately 20,400 bbls of oil-based material, 96,319 bbls

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of salt-base material, and 17,100 bbls of rainwater.

Chemicals of concern are barium, arsenic, benzene, crude oil waste, and NORM.

# C. Preliminary Assessment Results

Air monitoring around the ASTs and WMUs for volatile organic compounds (VOCs), percent oxygen, and the percent lower explosive limit (LEL) indicated no readings significantly different from background. The soil in the preliminary containment basin has readings of 500 microRoentgen/hour (uR/hr), according to a 1995 LDNR survey, which qualifies the material as NORM by Louisiana regulations.

### D. Site History/Background

Historical actions taken: LDNR permitted the facility to begin disposal of NOW material in September of 1982. The facility accepted oil and water based drilling mud, drill cuttings, produced saltwater, and oily water. Saltwater was injected into the saltwater disposal (SWD) well and solids were stockpiled in WMUs for treatment. The LDNR ordered the facility closed in August of 1898, based on violations of STATEwide Order No. 29-B, by Administrative Order No. UIC 89-2. The LDNR requested assistance from EPA Region 6 ERB in May of 1996.

# II SITE INFORMATION

### A. Site Activities to Date

1. Initial Removal Action (July 23 through September 26, 1996)

Initial removal actions can be referenced in POLREPs 1 - 7.

#### 2. Second Removal Action

For removal activities conducted up to May 5, 1998, see POLREPS 8-9.

CET has completed removing fluids and sludge from the following ASTs and box tanks (TBs): T1-T3, T11, T13, T14, TB1, TB2, TB4, TB5 and TB7. CET is continuing to remove the fluids and sludge from the following ASTs and TBs: T6-T9, T10, T12, and TB3. CET has completed the dismantling of ASTs T11, T13, and T14 and is continuing to dismantle ASTs T1-T2, T10, T12, TB1, TB4 and TB5 with acetylene torches. A frac tank was mobilized to the site and filled with rain water from Area A to facilitate fire control during cutting operations. All steel from the T10-T14 is checked for NORM contamination. Steel with NORM contamination will be sent to the GRI

facility in Gibson, Louisiana for decontamination. Decontaminated steel will be sent for scrap and the removed NORM will be held at the GRI facility until disposal can be arranged, which will be dependent on the NORM concentration analysis. Non-contaminated scrap metal will be transported to LaRose Scrap & Salvage, Inc., in a gross NOW decontamination area for dismantled steel originating from Area I.

The RSO has collected samples from each of the 50 barrel vacuum box contents which were removed from T10-T14 and Area J. Material with concentrations equal to or greater than 30 pCi/g are classified as NORM waste. Thus far, 500 bbls of NORM sludge has been staged in 10 vacuum boxes, which are awaiting transportation to permitted facilities. All other AST and TB waste has been disposed of as NOW material (see section V for details).

The RSO is also collecting two samples daily of particulates filtered by a less than 1 micron filter of 12,000 liters of air down wind of the work area exclusion zone in Area J. The particulates are analyzed for the concentration Radium 226. The highest sample concentration to date was 0.3% of the derived air concentration action level of 3E-7 pCi/ml.

Due to the amendment to Statewide Order No. 29-B (emergency rule), additional sampling of the WMUs and tank sludge and analysis of these samples for TCLP volatile and semi-volatile organic compounds was to be required for NOW disposed after May 1, 1998. As the elevated organic fractions of the NOW material on site has been disposed of, EPA OSC Mike Ryan requested an exemption from analysis for TCLP volatile and semi-volatile organic compounds of the remaining NOW material on site that would be required for disposal under this emergency rule. This exemption was received on May 7, 1998, from the Commissioner of the Office of Conservation, Warren Fleet, through Director of the Injection and Mining Division, Carroll D. Wascom.

EPA has also contacted LDEQ Water Quality Surveillance Program Manager, Chris Peiller, to establish water quality parameters for the on site treatment and discharge of rainwater accumulated in WMUs A - D.

# III NEXT STEPS

Continue removing materials from and dismantling the ASTs and TBs. EPA

will continue to coordinate with LDEQ and LDNR for state removal requirements.

RFPs are also being prepared for NOW and NORM waste disposal based on EPA, LDNR, and GRI analytical data. Final disposition of NOW materials will depend on LDNR's agreement of proposed EPA removal actions.

### IV KEY ISSUES

Deed and title search and review is on-going to determine current status of PRPs for enforcement action and cost recovery through the fund center.

### V PROPOSED ACTIONS

Excavation of NOW solids and disposal of same at a state permitted facility. Excavation of NORM contaminated material and disposal of same at a state permitted facility. P&A the SWD well and restore site to grade.

# VI COST INFORMATION

1. Initial removal action (July 23 - September 26, 1998)

SITE TOTAL (July 23 - September 26, 1998): \$133,946.52 Itemized cost information for the initial removal action can be referenced I POLREPS 1-7.

3. Second removal action (March 10 - COB May 11, 1998)

Contractor (CET)	\$450,000	•
Personnel		\$72,505.41
Equipment		\$ 3,157.91
Other		\$174,432.26
Contractor Total:		\$250,095.58

Government:		\$ 50,000
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EPA	\$10,858.50
USCG-GST	\$15,941.06
START	\$10,828.50
Government Total	\$37.628.06

Site Total (March 10 - COB May 11, 1998): \$287,723.64

Combined site total:

\$421,670.16

# VII DISPOSTION OF WASTE

NORM WASTE: 40,000 pounds of NORM contaminated steel, i.e. >25 uR/hr have been transported to the GRI facility in Gibson, LA.

NOW WASTE: the following volumes have been transported to US Liquids, in Jennings, LA: 2,915 bbl tank sludge; 1,800 bbl salt water; and 100 bbl washout water.

OSC: Mike Ryan P.E. START PM: Will Farrar

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